



# ITU-Korea project on Spectrum Management

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ITU - Caribbean



# Introducing ITU

### **Specialized Agencies of the United Nations**





**United Nations** 







**WHO** 



ILO



**UPU** 



**ICAO** 



**WMO** 



**IMO** 



**IAEA** 















**UNIDO** 



**WIPO** 





**IMF** 



A specialized agency of the UN with focus on Telecommunication / ICTs

Founded in 1865 (151 Years)

### ITU: A brief overview



**193** Member States

**558** Sector Members

**159** Associates

**ITU-R:** ITU's Radio-communication Sector globally manages radio-frequency spectrum and satellite orbits that ensure safety of life on land, at sea and in the skies.





ITU-T: ITU's Telecommunication

Standardization Sector enables development of international standards defining elements in the interoperability of ICT global infrastructure.

Headquartered in Geneva

**4** Regional Offices

**7** Area Offices.



**ITU-D:** Vital role in policy, regulation, and legal frameworks development. Implementation of ICT projects and capacity building activities.



### **ITU's GLOBAL PRESENCE**



5 regional offices, 8 area offices HQ in Geneva, Switzerland

### ITU-D on SM and Broadcasting



### > Spectrum Management

- SMS4DC (Spectrum Management System for Developing Countries)
  - ✓ To assist the administrations of developing countries on technical and regulatory procedures for managing spectrum
- Direct Assistance to Countries in cross-border frequency coordination and Spectrum Management Assessment
- Offering information: Radio-frequency usage fees, etc.
- Assisting development of training program (SMTP), EMF activities

### Broadcasting

- The Guidelines for Transition to Digital Broadcasting
  - ✓ To provide information on policy, technologies, network planning, and etc. for the smooth transition to Digital Broadcasting
- National roadmaps for the digital transition (helped 30 countries)
- Offering information: "Digital Dividend", "Trends in Broadcasting", etc.

### Other Activities

- ITU-D Study Group 1: Resolution 9 (Spectrum management), Question 8/1 (broadcasting), Question 7/2 (EMF)
- Cooperation with broadcasting organizations (WBU, EBU, ABU/AIBD etc.)

### Background of the Masterplan project



- > Increasing need of efficient spectrum management
  - Many countries adopted new approaches: unified licensing, market based spectrum allocation, technical neutrality, cognitive radio systems
  - Requires resources and skills to update national spectrum management frameworks
- > ITU Global and Regional Objectives
  - WTDC-14 Dubai Action Plan Objective 2: To foster an enabling environment for ICT development and foster the development of telecommunications/ICT networks, including enhancing awareness and capability of countries in the fields of spectrum planning and assignment, spectrum management and radio monitoring
  - AMERICA Regional Initiative 2: To provide assistance in the transition to digital broadcasting and spectrum management, including support for the elaboration of spectrum-management plans at the national, regional and global levels
- Offer from Korea: SM Masterplan Project in ASP (3 countries)

### **SM Master Plan Project in ASP**



- > SM Master Plan Project in ASP (3 countries)
- > ASP Regional Initiative 5: Policy and regulation
- Original Project
  - Bangladesh
  - Fiji
  - Brunei
- > Project extension signing during PP-14
  - Additional Funding and modified targets of the project
  - Three more countries evaluated to be the beneficiary of the technical assistance (Pakistan, Thailand and Vietnam)
  - 2 roadmaps prepared, commented, in editorial phase
- **Extension to the Caribbean region**

### Budget and Work plan



- Budget: 150 million Korean Won (around 140,000 USD) funded by Ministry of Science, ICT, and Future Planning, Republic of Korea
- Implementing Agency: ITU (close cooperation with CTU)
- Start Date: March 2015

#### **Deadlines**

- Selection of beneficiary Countries: May 2015 (CTU cooperation)
- Assessment of Spectrum Management: November 2015 (taking into account also CTU SM Task Force results)
- Developing Master Plans: May 2016 (CTU cooperation)
- Seminars: September 2016 (CTU cooperation)
- Assistance for implementation plan: November 2016 (CTU cooperation)
- Estimated End Date: February 2017

# Objectives and Targets of the Caribbean SM MP project



- To assist governments and regulators of developing countries in the Americas Region, in particular on Caribbean Countries in developing national spectrum management master plans
- At least for 3 beneficiary countries
  - Assessment of the spectrum management scheme: spectrum policy, spectrum use, authorization, spectrum sharing, spectrum monitoring...
  - Provision of advices concerning each beneficiary country's development of relevant policies, legislations and regulations based on request and interest of the countries
- Human capacity building [3 seminars, 60 participants in total]
- Provision of guidance during implementation of the master plans, where requested by beneficiary country and agreed by ITU

### Selection of Beneficiary Countries



#### Selection Criteria

- Reply to ITU Questionnaire: Yes
- Willingness to work with ITU: Yes
- Capacity to devote relevant and qualified internal resources to develop and implement SM Master Plan: 1(most) - 5(least) SC1
- Legal framework readiness and spectrum usage: 1-5 (low usage, no legal framework: 5) sc2
- History of ITU assistance: 1(least) 5(most) SC3

#### Selection Procedure

- Sending Questionnaire: ITU-Caribbean (March 2015)
- Recommendation of 3 beneficiary countries: ITU-Caribbean in consultation with CTU (April 2015)
- Selection of beneficiary countries: ITU-HQ based on ITU-CTU proposal with consent from MSIP, republic of Korea (May 2015)

#### Slide 11

switch value
 Sylvester Cadette, 11/03/2015
 high -5;
 Sylvester Cadette, 11/03/2015
 Remove; choose country by three groups;
 For synergy and further harmonization, Country covered by CTU
 Sylvester Cadette, 11/03/2015

### Activities



- Job Description and Experts recruitment: ITU in consultation with CTU and beneficiary countries
- ▶ 1<sup>st</sup> phase focused on assessment of overall aspects: data gathering, 5 days mission (meeting with Government, interviews with stakeholders), preparation of a draft (results of the CTU SM Task Force documents/reports will be taken into account in order to avoid duplication)
- ➤ 2<sup>nd</sup> phase focused on a Master Plan for specific recommendation reflecting request and interest of beneficiary countries: preparation of advices, 5 days mission (presentation and discussion), preparing final report
- Comment and Approval: review and comments by ITU and CTU, approval of governments for the release of final report
- > Seminars: topics and materials will be decided in consultation with experts and beneficiary countries (in cooperation with CTU)
- Assistance: to beneficiary countries for the preparation of implementation plans for Master plans; on request

### Roles and Responsibilities



#### > ITU

- Selection of beneficiary countries, recruitment of experts, provision of staff resources for overall project management, approval of the report
- Organizing the Seminars

#### > MSIP

- Cash contribution
- Collaborate with ITU in the selection of countries and experts

#### > CTU

- Recommend beneficiary countries and experts
- Comments on the scope of the reports, seminars and the contents of the reports

#### Beneficiary Countries

- Designate a qualified counterpart work with ITU
- Provide access to the relevant information and materials
- Provide administrative support including staff, visa, premises for the interview and training, etc.

## Report Framework (1)



#### **Executive summary**

#### 1. Introduction

- 1.1 The context and scope for the study
- 1.2 Report contents

### 2. Global trends in radio spectrum Management

- 2.1 Administrative processes
- 2.2 Existing and new licensing policies (including DSA, LSA, white space)
- 2.3 Fees
- 2.4 Market mechanisms
- 2.5 Policy in respect of non-commercial use

#### 3. Current Spectrum Management Framework

- 3.1 Legislative framework
- 3.2 Process (including internal coordination with stake-holders)
- 3.3 Licensing
- 3.4 Spectrum fee

# Report Framework (2)



- 3.5 Monitoring, type approval and enforcement
- 3.6 Cross-border frequency coordination
- 3.7 Spectrum policy, management issues and strategy (if exists)

### 4. Current spectrum demand and issues - by sector/service

- 4.1 Data sources used in analysis
- 4.2 NTFA (National Table of Frequency Allocation)
- 4.3 Analysis of current spectrum use
- 4.4 Issues identified by Stakeholders in relation to frequency use
- 4.5 Conclusions, issues to deal with during the assistance

#### 5. Future demands for spectrum

5.1 Spectrum Demand Trends by Sector/Service

#### 6. Recommendations and Key issues

- 6.1 Allocation Policy
  - 6.1.1 Improving information on spectrum allocations and policy
  - 6.1.2 Making allocation decisions

## Report Framework (3)



- 6.1.2.1 Role of ITU and other international and regional organizations
- 6.1.2.2 Role of local investors and spectrum users
- 6.1.2.3 Unique needs of the country
- 6.1.2.4 Cross-border frequency coordination agreements
- 6.1.3 Consultation arrangements
- 6.1.4 Balance between government and commercial allocations
- 6.2 Assignment, licensing, monitoring and enforcement
  - 6.2.1 Policy principles
  - 6.2.2 Licensing policy and fees
  - 6.2.3 Planning and licensing processes
  - 6.2.4 Monitoring, type approval and enforcement processes
- 6.3 Spectrum management strategy
- 6.4 Capacity building

# **Annexes Abbreviations**



### THANK YOU!!

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